

front and back facets closing said end sections, each with a mirror (10, 12),
a metallization (6) over said body and said ridge for injecting carriers into said
active region, and

characterized by

means (11, 13) for limiting said injection of carriers by at one of said end
sections, thus providing an at least one unpumped end section in the vicinity of said
front and/or said back facet.

2. (Amended) The laser diode according to claim 1, wherein
two means (11, 13) for limiting the injection of carriers are provided, one each at
the front and the back end section of the laser diode.

3. (Amended) The laser diode according to claim 1, wherein
the means for limiting the injection of carriers is an isolation layer (11, 13)
between the laser diode's active region (2, 3, 4, 7) and the metallization (6).

4. (Amended) The laser diode according to claim 3, wherein
the isolation layer (11, 13) between the laser diode's active region (2, 3, 4, 7) and
the metallization (6) is made from SiO₂, Al₂O₃, TiN or, preferably, SiN.

5. (Amended) The laser diode according to claim 3, wherein
the isolation layer (11, 13) is extending under only a fraction of the area of the
metallization (6).

6. (Amended) The laser diode according to the claim 3, wherein
the isolation layer is about 50 nm thin and preferably covers an area of
approximately 20 µm x 40 µm.

7. (Amended) The laser diode according to claim 3, wherein the isolation layer's (11, 13) longitudinal extension is at least as long as, preferably longer than, the mean diffusion lengths of the free carriers within the laser's active region (2, 3, 7).

8. Cancelled.

9. (Amended) The laser diode according to claim 3, wherein the isolation layer's (11, 13) lateral extension is wider than the laser's waveguide ridge (4), but smaller than the metallization's lateral extension.

10. (Original) The laser diode according to claim 3, wherein the laser diode substrate is GaAs, the active region is AlGaAs/InGaAs, and the isolation layer is SiN.

11-13. ((Withdrawn))

14. (New) The laser diode according to claim 3, wherein the isolation layer's longitudinal extension is longer than the mean diffusion lengths of the free carriers within the laser's active region.

REMARKS

Claims 1-7 and 9-14 are pending in the application upon entry of this amendment. Claims 1-7 and 9 have been amended herein. Claim 8 has been canceled. Claim 14 has been newly added. Favorable reconsideration of the application, as amended, is respectfully requested.